

REMARKS

Claims 1-9 are pending in the application and have been rejected. With this Amendment, claims 1 and 2 have been amended to further define the invention. Independent claim 1 has been amended to define the switch is a membrane switch, see for example page 2, last full paragraph and page 6 last paragraph for support. No new matter has been added.

Claim 1 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Field et al (U.S. Patent No. 4,996,468) in view of Buttner et al. (U.S. Patent No. 5,167,432). Claims 2, 3, 8 and 9 been rejected under 35 U.S.C. § 103(a) as being unpatentable over Field et al. ('468) in view of Buttner et al. ('432) and further in view of Burgess (U.S. Patent No. 6,329,617). Claims 4-6 been rejected under 35 U.S.C. § 103(a) as being unpatentable over Field et al. as modified by Buttner and Burgess and further in view of Stanley (U.S. Patent No. 5,986,221). Claim 7 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Field et al. as modified by Buttner et al. and Burgess and further in view of Miller (U.S. Patent No. 5,418,342).

Regarding independent claim 1, the Examiner states it would have been obvious to a person of ordinary skill in the art to apply the teaching of Buttner et al. to Field et al. to mount the membrane switch on the frame with the sponge being located thereon because it is for the same purpose of providing shock absorption during operation of the machine reducing contact chatter and misoperation.

It is respectfully submitted that the cited references cannot anticipate nor render obvious independent claim 1, nor the claims dependent thereon. Foam body 2 disclosed in Buttner is applied to fix and position the elastic pressure strip 11, such as an elastic plastic strip, see Col. 3, lines 63-66, thereon with respect to the switching strip 8 and it should have sufficient stiffness and strength. According to common classification based on stiffness, hardness and density, see for example Wikipedia, the sponge defined in the present invention belong to a class of the type being "low-density flexible foam." Therefore, the foam body 2 described in Buttner cannot be construed as the sponge claimed in independent claim 1.

The sponge claimed in the present invention is also distinct from the "sponge rubber" mentioned in the Field reference. Sponge rubber is a type of rubber, generally produced by adding blowing agent to rubber, either natural or synthetic, commonly used for shoe soles, whereas the sponge claimed in the application is a synthetic material

based mainly on polyurethane. While polyurethane can be used in producing a certain type of rubber, polyurethane elastomers belong to a different type of polyurethane product than sponge. According to the common classification based on stiffness, hardness and density, as mentioned above, the sponge of the present invention which is a "low density flexible foam" whereas the Field rubber-type material belongs to the classification "soft solid elastomers." These two types of material are used for different purposes due to their different physical properties.

Field et al., in Col. 7, lines 43-45, describes his material as "If the switch contacts an object with four ounces of pressure, it will stop the machine within the collapsing distance of the rubber." Field indicates that it takes at least or about four ounces of pressure to produce a response from the switch. It is apparent that this level of response pressure is characteristic of rubber, and is much greater than that produced by the claimed sponge. A response is readily produced by a switch of the present invention upon a light touch of the finger to the sponge.

Sponges are more sensitive and have longer collapsing distances over rubber or other foams. The technical advantages of the claimed invention are also set forth in the last paragraph on page 1 of the Description.

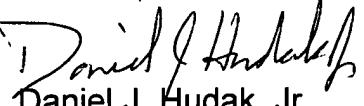
It is respectfully submitted that it would not have been obvious for a person of ordinary skill in the art to apply the teaching of Buttner to Field to mount the membrane switch on the frame with the sponge being located thereon to achieve the claimed invention.

As claims 2-9 are dependent upon claim 1, it is respectfully submitted that claims 2-9 also cannot be rendered obvious by the cited references.

Should the Examiner have any questions regarding this response, a telephone call to the undersigned is greatly appreciated.

Respectfully submitted,

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